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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,827	10/03/2003	Rene Kapik	9305-18	1137
20792	7590	07/14/2004		
MYERS BIGEL SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627				
EXAMINER JOLLEY, KIRSTEN				
ART UNIT		PAPER NUMBER		
1762				
DATE MAILED: 07/14/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/678,827	Applicant(s) KAPIK, RENE	
	Examiner Kirsten C Jolley	Art Unit 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 25-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/3/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of group I, claims 1-24, in the reply filed on June 14, 2004 is acknowledged. The traversal is on the ground(s) that the nature of the subject matter is such that it would enable the Examiner to search the claims of Groups I and II together without undue hardship. This is not found persuasive because the considerations used for examining method claims are different than those used for examining product claims. Product claims are examined based on the properties of the final article produced, not on the method used to create the article. When examining claims directed to a coated product, the applicable art includes art directed to Applicant's final product produced by any method that would reasonably give that same product. Therefore there is an additional burden in examining two classes of invention.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Objections***

2. Claim 12 is objected to because of the following informalities: The period is missing at the end of claim 12. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2, 6, and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Wu et al. (US 6,656,581).

Wu et al. discloses a method of providing a web 9 of nonwoven material which may be a meltblown nonwoven layer (col. 7, lines 3-19), applying a barrier finish to the web such that the web serves as a barrier to liquids by extrusion lamination, stretching the web in the cross-machine (widthwise) direction without hindering barrier properties of the web, and subjecting the coated nonwoven web to both cooling and heating to cure the barrier finish. As to claim 2, Wu et al. teaches preheating the web before cross-machine direction stretching (col. 11, lines 10-11 and col. 12, lines 18-23). Wu et al. teaches the use of interdigitating rolls to perform the stretching. As to claim 8, Wu et al. teaches that the stretching rollers may be heated.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4-5, 7, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (US 6,656,581).

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As to claim 4, Wu et al. does not teach the amount of stretching. It would have been obvious for one having ordinary skill in the art to have determined the optimum amount of stretching in the Wu et al. process depending on the amount of breathability that is desired through routine experimentation.

Wu et al. does not teach use of a tenter frame or bow rolls to perform stretching. However, it would have been obvious to have substituted one means for cross-machine direction stretching for another with the expectation of achieving similar results.

7. Claims 1-8 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sneed et al. (US 4,517,714) in view of Powers (US 5,711,994).

Sneed et al. discloses a method of providing two webs of meltblown nonwoven material, and stretching the webs in the widthwise direction using interdigitating rollers. Sneed et al. does not teach applying a barrier finish to the web. Powers is cited for its teaching of applying finishing compositions to a nonwoven multilayer composite comprising meltblown fibers, including antistatic agent and repellent agent (col. 6), followed by curing of the compositions in drying station 40. It would have been obvious for one having ordinary skill in the art to have treated the nonwoven barrier fabric material in the process of Sneed et al. with finishing compositions taught by Powers in order to render Sneed et al.'s fabric antistatic and repellent and because Powers states "the present invention is suitable for treating nonwovens broadly."

As to claim 2, Sneed et al. teaches that the webs may be preheated in col. 3, line 30.

As to claim 3, Powers teaches applying the finish compositions by spraying in col. 7. However it is noted that spraying and immersion are well known equivalent means for applying

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coating liquids. It would have been obvious to have substituted immersing for spraying in the process of Sneed et al. in view of Powers with the expectation of equivalent results.

As to claim 5, Sneed et al. teaches that a tenter frame may be used in col. 3, line 39.

As to claim 8, Sneed et al. teaches that the interdigitating rolls may be heated in col. 3, lines 14-26. The heated interdigitated rolls would could the finish compositions during stretching.

Claims 4, 7, and 24 are rejected for similar reasons as discussed above in section 6.

8. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Powers (US 5,711,994) or Snowden et al. (US 2003/0045193), taken in view of Sneed et al. (US 4,517,714).

Both Powers and Snowden et al. disclose a method of providing a fibrous layers to form a laminate having a spunbond-meltblown-spunbond (SMS) structure, bonding the layers together, then treating the laminate with a finish coating composition comprising both antistatic agent and repellent agent. Powers and Snowden et al. lack the teaching of stretching the fibrous laminate in the widthwise direction, and both references teach that the bonding of the SMS layers may be performed by a number of conventionally known techniques.

Sneed et al. is cited for its teaching of stretching multiple nonwoven layers widthwise simultaneously while also bonding the layers using interdigitating rollers. It would have been obvious for one skilled in the art to have used the method of Sneed et al. to bond and stretch the SMS layers and form a laminate in the process of Powers or Snowden et al. since the method of Sneed et al. is particularly suited to bonding similar nonwoven layers of barrier material.

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Powers and Snowden et al. do not specify the amount of bonding. It would have been obvious for one having ordinary skill in the art to have determined the optimum amount of bonding depending on the needed extent of bonding for the product's end use and depending on the specific size and materials used through routine experimentation.

The remaining dependent claims are rejected for similar reasons as discussed above in sections 6 and 7.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Welchel et al. (US 6,286,145), Brady et al. (US 6,258,308), Schwarz (US 4,223,059), Wu et al. (US 5,865,926), Morman et al. (US 6,623,837), Langley et al. (US 2003/0124324), and Strack et al. (US 5,681,645) are cited to demonstrate the state of the prior art related to the invention.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirsten C Jolley whose telephone number is 571-272-1421. The examiner can normally be reached on Monday to Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P Beck can be reached on 571-272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Kirsten C Jolley  
Patent Examiner  
Art Unit 1762

kcj